Water Resource Mitigation Task Force - Compilation for the June 22, 2022 Meeting

Possible list of topics for task force discussion shared with Task Force members on June 6, 2022

- Impairment standard
    - How do you account for accumulative use/cap on total impact
    -
- Conservation
    - Municipal/agricultural
    - Water use reductions
    - Leakage
    -
    -
- Mitigation flexibility
    - Compliance over time
    - Paired with conservation strategy
    - In time and in place standards
        - Moving surface water to groundwater sources - timing / re-timing considerations
        - Fish critical times
    - In kind standard
    -
    -
- Net ecological benefit standard
- Storage infrastructure
    - Temperature
    -
- Accuracy of modeling
    - Can be both up or down
    -
- Climate impacts
    - Shift in timing of flows
    -
- Aquifer recharge
- Reclaimed water
- Accountability
    - Metering, monitoring, enforcement
    -
- Future work for Ecology (proviso) to look at water resources more broadly
-
-
-
-

Edits and comments from Bruce Wishart, Environmental Advocacy Organizations Representative:
"This is a fairly comprehensive list of topics, not sure about the order and which topics to take first, may make sense to talk about the scope of the proposal first. Dave Christensen has suggested, for example, that this is a large, complicated topic and, given the timing, the task force could start with an area where there may be more agreement."

Possible list of topics for Water Resource Mitigation task force discussion

- Protect tribal treaty rights
    - Process to ensure protection of these rights
- Impairment standard
    - How do you account for accumulative use/cap on total impact
- Conservation*
    - Municipal/agricultural
    - Water use reductions
    - Low volume plumbing codes
    - Best management practices
    - ((~~Leakage~~))
- Demand Management*
    - Requiring pretreatment
    - Reduction of leak rates
- Mitigation flexibility
    - Compliance over time
    - Paired with conservation strategy
    - In time and in place standards
        - Moving surface water to groundwater sources - timing/re-timing considerations
        - Fish critical times
    - In kind standard
- Net ecological benefit standard
- Storage infrastructure
    - Temperature
- Accuracy of modeling
    - Can be both up or down
- Climate impacts
    - Shift in timing of flows
    - Increased demand for water as temperature rises
    - Increased water temperature as a result of warmer air temperature
- Aquifer recharge
- Reclaimed water
- Accountability
    - Metering, monitoring, enforcement
    - Public notice
    - Right to appeal decisions
- Future work for Ecology (proviso) to look at water resources more broadly

*Conservation and demand management can be discussed as standalone issues but have also been raised in terms of a requirement of any flexible mitigation project - sequenced mitigation.

Comments from John Weidenfeller, Municipal Water Purveyor Representative, and Carl Schroeder, Washington Cities Representative:

Recommended Topics for Discussion at the Water Resource Mitigation Joint Legislative Task Force.

Goal: Empower Ecology to manage water resources in the state in a manner that recognizes the public benefit and necessity for public water suppliers to actively manage their systems and when necessary expand to address related growth as dictated under GMA.

1. **Mitigation – Experience in the task force has indicated that our focus on mitigation is too narrow. Questions should be: (1) When is mitigation needed (less often), (2) If needed what does it look like?**

2. **Distinguish between impact and impairment.**

3. **Explore de minimis "thresholds" for finding impairment to minimum instream flows, or a pooled cumulative impact buffer similar to other states such as Colorado and Oregon.**

4. **When in-kind ("water for water") mitigation is proposed, allow timing and place flexibility (out of time/out of place) providing appropriate criteria are met.**

5. **Area of model uncertainty** - Some "cut off" for how far the models can get us. **Modeled results below the model error threshold should not be construed as proof of impact or impairment.**

6. **Discussion of new and higher conservation responsibilities with new municipal water rights accessed through this new process.**

7. **Is there a point where public interest and cost/benefit are a consideration? Do we want legislative clarification or revision of the Overriding Considerations of the Public Interest (OCPI) exemption in RCW 90.54.020(3)?**

Request for more information from Lisa Pelly, Environmental Advocacy Organizations Representative:

Information about when OCPI was used would be interesting, and also any information about any applications that have come in after Foster that they have had to deny due to Foster would be interesting.

At the previous task force meeting, Dave said that Ecology used OCPI for 22 applications out of 4600 decisions made on applications that were processed after the Postema decision and prior to the Foster decision (approximately 15 years). He said these could include applications that used out of kind mitigation and would not be allowed under Foster.

Comment provided by Megan Kernan, Department of Fish and Wildlife, Water Policy Manager (see pdf below for more information):

Possible list of topics for Water Resource Mitigation task force discussion shared with Task Force members on June 6, 2022

- Impairment standard
    - How do you account for accumulative use/cap on total impact
- Conservation
    - Municipal/agricultural
    - Water use reductions
    - Leakage
- Mitigation flexibility
    - Compliance over time
    - Paired with conservation strategy
    - In time and in place standards
        - Moving surface water to groundwater sources - timing / re-timing considerations
            - Potential impacts to groundwater streamflow contributions and fish
        - Fish critical times
    - In kind standard
- Net ecological benefit standard
- Storage infrastructure
    - Temperature
- Accuracy of modeling
    - Can be both up or down
- Climate impacts
    - Shift in timing of flows
- Aquifer recharge
- Reclaimed water
- Accountability
    - Metering, monitoring, enforcement
- Future work for Ecology (proviso) to look at water resources more broadly

Additional information provided by Megan Kernan, Department of Fish and Wildlife, Water Policy Manager:

Ecosystems Functions Supported by Groundwater and the Impacts of Reduced Groundwater Flow

Ecosystem Functions	**Mechanism**	**Impact**
Flora and fauna		
Phreatophytic vegetation	Lowered groundwater elevation	Increased temperature, sedimentation, organic matter reduction, and loss of pooling habitat.
Macrobenthic invertebrates	Lowered groundwater elevation	Lowered primary production and food for fish
Stream water quality		
Dissolved Oxygen	Lack of groundwater upwelling in still reaches	Reduced viability of redds
Temperature	Lack of groundwater upwelling	Excess summer heat, potential fish kills
Pollutants	Lack of dilution or exchange in benthic zone	Harms most aquatic life
Hydrology and geomorphology		
Perennial flow	Seasonal groundwater drawdowns	Disconnected pools separated by dry river, favors non-native fish
Sorting of spawning materials	Surface flows go subsurface	Diminished surface flows alter sorting processes

Table 2: A list of ecosystems functions supported by groundwater and the impacts of reduced groundwater flow. Sources: Groeneveld and Griepentrog (1985), Brunke and Gonser (1997), Woody and Higman (2011), and Moyle et al. (2003).